OFIL

DayCor® UV Eye



In the world of critical electrical systems, the growing demand for power, aging infrastructure, and overloading of grids are leading to an increasing number of failures. The need for reliable solutions to ensure uninterrupted power supply and to efficiently manage the health of the electrical grid has never been more critical.

Spotting the Invisible: The Role of Corona Partial Discharge (PD) and Arcing Detection

Identifying corona PD and arcing is crucial in preventing power system failures. Early detection enables timely interventions to avoid costly and disruptive outages, maintaining system stability and performance.



DayCor® Technology Inside

Experience unmatched clarity and performance with OFIL's proprietary DayCor® technology. This camera sees the unseen by detecting corona PD and arcing, utilizing solar blind UV technology that operates in full daylight, unaffected by solar radiation. It captures a spectral range of UVC 240-280nm, ensuring superior detection capabilities.

DayCor® UV Eye HD

Solar Blind UV Camera is a camera core for OEM integration, specifically designed to detect and pinpoint corona PD - a major but often unseen hazard to electrical equipment. It's robust, has the highest sensitivity, precise fault pinpointing, high-definition imaging and powerful zoom for precise corona PD detection.

The camera has an IP65 environmental protection rating, ensuring it delivers optimal performance even in challenging weather conditions. It is easy to integrate via its API.







Product Key Features



Highest Sensitivity:

Best-in-class sensitivity to PD detection at 1pC @ 15m, certified by Eurotest lab.



Precise Pinpointing:

Ensures accurate fault localization.



HD Resolution:

720p video for detailed imaging.



Powerful Zoom:

Powerful zoom capabilities for detailed fault analysis.



Non-Destructive Testing:

Allows for safe inspections from a distance of up to 150-200 meters*



Environmental Protection IP65:

Offers robust protection against dust ingress and low-pressure water jets.





Quickly connect and control through API, ONVIF support, customizable UV thresholds for setting alerts.



Pan & Tilt Compatibility:

Supports versatile positioning options for optimal coverage and fault detection.



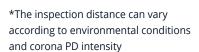
Multiple Interfaces:

Includes Ethernet and HDMI.



DayCor Inside:

Embedded with proprietary DayCor technology for superior performance.



Sensitivity to PD

1pC@ 15m

Tested by Eurotest

Germany

Integrated Precision, Unmatched Clarity.

- Stay ahead of electrical failures with reliable corona PD detection.
- Streamline your operations and maximize efficiency: designed for seamless integration into OEM systems, trains, and real-time monitoring.
- **Detect with confidence and diagnose with clarity:** deliver sharp, clear visuals for precise fault identification.
- **Easily connect** with existing monitoring systems for automated analysis.





Applications



Vehicle Mounted Inspection of Transmission & Distribution Lines



Continuous Monitoring of Substations & HV Components

Robot-Mounted Installations | Fixed Installations | PTZ Systems



Train mounted inspection of railways overhead lines



Integration in OEM systems

Product Accessories

- Stabilizing Damper Mounting Plate for UV Eye: designed for applications involving mobility and vibrations, such as vehicle installations.
- Connect Software: Windows-compatible software designed for seamless remote control of DayCor® cameras. Offering remote access, multi-camera support, and real-time monitoring directly from your computer.







TECHNICAL SPECIFICATIONS

UV - OPTICAL PROPERTIES	
Minimum Discharge Detection	1pC @ 15 m Tested & certified by Innogy SE-Eurotest Germany: IEC 60270:2000
Minimum UV Sensitivity	2.0x10-18 watt/cm ²
Fields of View	H: 10° - 1.6° V: 5.6° - 0.9° Synchronized with visible channel, optic & digital, continuous
Focus	Full manual and auto focus for both channels
UV Zoom	2x Optical 6.25x Digital, Slaved to the visible channel
Spectral Range	240-280nm
UV Frames Integration	ON/OFF
VISIBLE - OPTICAL PROPERTIES	
UV/Visible Overlay Accuracy	Deviation < 1 miliradian
Minimum Visible Light Sensitivity	0.06 Lux
Video Standard	HD, 720p ,1280 x 720
Fields of View	H: 10° - 1.6° V: 5.6° - 0.9° Synchronized with UV channel, optic & digital, continuous
Focus Range	3m 9.84ft Automatic & manual
Visible Zoom	12x Optical, 12x Digital, continuous
UV & Visible Channels Display Modes	Combine UV & Visible, UV only, Visible only
DATA OUTPUT	
Video Out Standard	HD 720p
Streaming Format	Real Time Streaming Protocol - RTSP
Video Compression Standard	H.264
I/O & CONTROLS	
I/O Interfaces	HDMI, 1GB Ethernet bi-directional
ENVIRONMENTAL	
Storage and Operation Temp	-20°C up to +55°C -4°F up to +131°F, fan less
IP Rating	IP 65
PHYSICAL CHARACTERISTICS & POWER SOURCE	
Weight	3.6 Kg 7.9 lb
Dimensions	L32.5 x W18.5 x H15cm 12.7" x 7.28" x 5.9"
Nominal Power Consumption	12V DC, 36W
Vibration and Shock	ETSI EN 300 019-2-5 V3.0.0 (2002-12), IEC 60068-2-64
LED Indicators	On\Off
Mounting interface	Standard M5 (x6) screw fixture, on the bottom cover
ACCESSORIES	

Connect - Remote Control Desktop Software, Stabilizing Damper Mounting Plate